REMARKS

Claims 4-16 are now pending in the application. Claims 1-3 are now cancelled. Claims 4, 11, and 13-16 are now amended. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

ELECTION/RESTRICTION

Applicants thank the Examiner for withdrawing the restriction requirement directed to Group III and rejoining Claims 15 and 16 with Group II.

Applicants maintain that consideration of all of the claims as filed is not unduly burdensome. However, in order to expedite prosecution of this application Applicants now cancel non-elected Claims 1-3 without prejudice.

DRAWINGS

The drawings stand objected to for allegedly failing to show every feature of the invention specified in the claims.

Specifically, the Office Action alleges that the figures fail to show the following feature of Claim 5: "ejector is interposed near the cap." Applicants respectfully direct the Examiner to Figure 8 and the corresponding text of paragraph [0082], which recites "[t]he ejectors 101 are provided in the vicinity of the caps 73 so as to be able to perform efficient suction of the function liquid droplet ejection heads 31." Therefore, contrary to the Office Action's assertions, Figure 8 shows the "ejector [101] interposed near the cap [73]," as recited in Claim 5.

The Office Action alleges that the figures fail to show the following feature of Claim 6: "first control means for controlling the flow rate regulating valve based on a detection result obtained by the pressure detection means." Applicants respectfully direct the Examiner to Figure 8 and the corresponding text of paragraphs [0082], [0096], and [0097]. Paragraph [0096] identifies the "control means 6" of Figure 8 as being a "(first control means)." As set forth in paragraph [0097], the "flow rate regulating valve" is at 196 of Figure 8. Paragraph [0082] identifies the pressure detection means as "a cap-side pressure sensor 122." Therefore, contrary to the Office Action's assertion, Figure 8 shows "first control means [6] for controlling the flow rate regulating valve [196] based on a detection result obtained by the pressure detection means [122]," as recited in Claim 6.

The Office Action alleges that the figures fail to show the "flow rate regulating valve" and the "suction pipeline gate valve," as recited in Claim 8. As set forth above, Figure 8 illustrates the "flow rate regulating valve" at reference numeral 196. Paragraph [0082] identifies the "cap-side gate valve 123 [Figure 8]" as being "a suction pipeline gate valve." Therefore, contrary to the Office Action's assertions, Figure 8 illustrates "a suction pipeline gate valve" at reference numeral 123.

The Office Action also alleges that the figures fail to show that the "first control means closes the flow rate regulating valve and the suction pipeline gate valve when the suction of the function liquid droplet ejection head is finished," as recited in Claim 8. As set forth above, the first control means is illustrated in Figure 8 at 6, the flow rate regulating valve is illustrated at 196, and the suction pipeline gate valve is illustrated at 123. Therefore, contrary to the Office Action's assertions, these features are illustrated in the figures.

The Office Action alleges that the figures fail to show the following features of Claim 9, "the suction pipeline gate valve is made of a three-way valve having an atmosphere releasing port" and "first control means opens the atmosphere releasing portion simultaneously with closing of the suction pipeline gate valve and opens the flow rate regulating valve again." As set forth above, the suction pipeline gate valve is illustrated in Figure 8 at reference numeral 123, the first control means is illustrated in Figure 8 at 6, and the flow rate regulating valve is illustrated in Figure 8 at 196. The generic illustration of the valve 123 encompasses a three-way valve design having an atmosphere releasing port, which is described at paragraph [100]. Therefore, these features are illustrated in the figures.

CLAIM OBJECTIONS

Claims 13-16 stand objected to under 37 C.F.R. § 1.75(c) as allegedly being of improper dependent form for failing to further limit the subject matter of a previous claim. The Office Action also alleges that Claims 13-16 are inconsistent with the parent claim.

Applicants now present Claim 13 in independent form with Claims 14-16 depending therefrom. Applicants believe that these amendments overcome the objections to Claims 13-16.

REJECTION UNDER 35 U.S.C. § 112

Claims 4-14 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point and distinctly claim the subject matter which Applicants regards as the invention. This rejection is respectfully traversed.

The Office Action rejects Claim 4, in part, because Claim 4 is allegedly unclear as to whether or not features of the preamble should be read into the body of the claim.

As set forth at M.P.E.P. § 2111.02, "The determination of whether a preamble limits a claim is made on a case-by-case basis in light of the facts in each case; there is no litmus test defining when a preamble limits the scope of a claim." "If the claim preamble, when read in the context of the entire claim, recites limitations of the claim, or, if the claim preamble is 'necessary to give life, meaning, and vitality' to the claim, then the claim preamble should be construed as if in the balance of the claim." "Any terminology in the preamble that limits the structure of the claimed invention must be treated as a claim limitation."

Applicants submit that the preamble of Claim 4 does not recite limitations of the claim and is not necessary to give life, meaning, and vitality to the claim. Therefore, the preamble of Claim 4 should not be read into the body of the claim.

The Office Action alleges that Claim 4 does not include sufficient antecedent basis for the feature "all nozzles." Applicants now amend Claim 4 to provide proper antecedent basis for this feature.

The Office Action asks Applicants to identify in the specification the scope of the feature "working fluid supply means." This feature is defined throughout the specification as filed, such as at, for example, paragraphs [0068] and [0094] and in the figures at reference numeral 5.

The Office Action states that "Claim 10 recites 'a storage tank' which appears to be a double inclusion of the working fluid supply means." In contrast to the Office Action's assertion, the storage tank is the recycling tank 162 illustrated in Figure 8 and

described throughout the specification, such as at ¶¶ [0102] and [103]. The fluid supply means is illustrated and described throughout the specification as filed, such as at ¶ [0068] and at Figure 1, reference no. 5.

The Office Action states that "Claim 8 recites 'a suction pipeline gate valve' in line 2. It appears to be a double inclusion of the 'flow rate regulating valve' recited in Claim 6." In contrast to the Office Action's assertion, the suction pipeline gate valve is illustrated in Figure 8 at 123 and described throughout the application as filed, such as at ¶ [0082]. The flow rate regulating valve is illustrated at no. 196 and described throughout the application, such as at ¶ [0094].

Claim 11 stands rejected because the feature "the suction apparatus" is allegedly without antecedent basis. Applicants now amend Claim 11 to overcome this rejection.

The Office Action rejects Claim 12 alleging that it is "uncertain what standard is being defined" with relation to the feature "in accordance with the plurality of function liquid droplet ejection heads." Applicants are unable to determine what the basis is for this rejection. Applicants ask that the Office Action please clarity this rejection.

The Office Action alleges that "a plurality of function liquid droplet ejection heads" set forth in Claim 12 is a double inclusion of the "function liquid droplet ejection head" of Claim 1. Claim 1 is now cancelled and Claim 12 was never dependent upon Claim 1. If the Office Action intended to cite Claim 4 instead of Claim 12, the difference between Claim 4 and Claim 12 is that in Claim 4 a single head is claimed while in Claim 12 a plurality of heads are claimed.

The Office Action rejects Claim 13 citing double inclusion of the feature "function liquid droplet ejection heads." Applicants now amend Claim 13 to overcome this rejection.

Applicants submit that the above explanations overcome the Section 112 rejections. Applicants respectfully request reconsideration and withdrawal of the Section 112 rejections.

REJECTION UNDER 35 U.S.C. § 102

Claims 4-7 and 10 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Wallace (U.S. Pat. No. 4,362,572). Claims 4, 5, 10, and 11 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Yamazaki et al. (U.S. Pat. No. 4,296,418). These rejections are respectfully traversed.

The Office Action states, on page 6, that:

> the function recitation that the ejector "sucks all nozzles" has not been given patentable weight because it is narrative in form. In order to be given patentable weight, a functional recitation must be expressed as a "means" for performing the specified function, as set forth in 35 U.S.C. 112 6th paragraph.

Applicants respectfully disagree with the accuracy of this statement. There is no requirement that functional language be expressed as a "means for" statement.

Applicants respectfully direct the Examiner to MPEP § 2173.05(h). As set forth in this section, "[a] functional limitation must be evaluated and considered, just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art in the context in which it is used." This section further provides examples of acceptable functional language, none of which include "means for" language.

While functional language must comply with 35 U.S.C. § 112, ¶ 2, there is no requirement that it be expressed as a "means for" statement, which is set forth in Section 112, ¶ 6. Applicants respectfully submit that the language "an ejector which sucks" of Claim 4 is entitled to patentable weight because it complies with the requirements of Section 112, ¶ 2.

Amended Claim 4 recites, in part and with reference to Figures 4A and 8 for exemplary purposes only as the invention includes numerous embodiments, "an ejector [101] which sucks all of said nozzles [39]."

According to the Office Action, the Wallace reference discloses an apparatus for cleaning ink jet printer heads with an ejector at reference numerals 14 and 18 of Figure 1. However, the specification identifies reference numerals 14 and 18 as a hose/tube and a block respectively. Col. 3, lines 25-26. Neither of the hose/tube or block are equivalent to or suggest "an ejector which sucks all of said nozzles," as set forth in Claim 4. Therefore, the Wallace reference fails to anticipate or render obvious each and every element of Claim 4. Applicants respectfully request reconsideration and withdrawal of this Section 102 rejection of Claim 4 and those claims dependent therefrom.

According to the Office Action, the Yamazaki et al. reference discloses an ink jet printing apparatus having a ejector at reference numeral 38 of Figure 1. However, the specification identifies reference numeral 38 as a flexible connector. Col. 3, line 24. The flexible connector is not equivalent to and does not suggest "an ejector which sucks all of said nozzles," as set forth in Claim 4. Therefore, the Yamazaki et al. reference fails to anticipate or render obvious each and every element of Claim 4. Applicants

respectfully request reconsideration and withdrawal of this Section 102 rejection of Claim 4 and those claims dependent therefrom.

REJECTION UNDER 35 U.S.C. § 103

Claims 8 and 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Wallace (U.S. Pat. No. 4,362,572). This rejection is respectfully traversed.

Claims 8 and 9 depend from Claim 4 and include all of the features of Claim 4. Therefore, Claims 8 and 9 are not obvious in light of the Wallace reference at least for the reasons set forth above with respect to Claim 4. Applicants respectfully request reconsideration and withdrawal of this Section 103 rejection of Claims 8 and 9.

Claims 13-16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Wallace (U.S. Pat. No. 4,362,572) or Yamazaki et al. (U.S. Pat. No. 4,296,418). This rejection is respectfully traversed.

Amended Claim 13 recites, in part and with reference to Figures 4A and 8 for exemplary purposes only as the invention includes numerous embodiments, "an ejector [101] that sucks all nozzles [39]."

The relevant teachings of the Wallace and Yamazaki et al. references are set forth above. As set forth above, each of the Wallace and Yamazaki et al. references fails to disclose or suggest "an ejector that sucks all nozzles," as set forth in amended Claim 13. Therefore, combination of the Wallace and Yamazaki et al. references fails to render obvious Claim 13, and those claims dependent therefrom. Applicants respectfully request reconsideration and withdrawal of this Section 103 rejection.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: July 11, 2005

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